North Carolina Community College System

Information Technology Strategic Plans

2007-2009 Biennium

I. Summary of Plan Drivers

A. Departmental/Agency strategic business initiatives and major business requirements

The <u>mission</u> of the North Carolina Community College System is to open the door to high-quality, accessible educational opportunities that minimize barriers to post-secondary education, maximize student success, develop a globally and multi-culturally competent workforce, and improve the lives and well-being of individuals by providing:

   * Education, training and retraining for the workforce, including basic skills and literacy education, occupational and pre-baccalaureate programs.
   * Support for economic development through services to and in partnership with business and industry and in collaboration with the University of North Carolina System and private colleges and universities.
   * Services to communities and individuals which improve the quality of life.

 Revised and adopted September 2006 by the State Board of Community Colleges

NC Community College System <u>Strategic Plan, 2007-09</u>

1. Critical Issue: Changing Demographics, as associated with:
    - NC Population increase fueled by legal & illegal immigrant population, particularly in the Latino/Hispanic segment
    - Baby Boomers aging out of the NC workforce
    - Shift in NC population from rural to primarily urban or resort/retirement communities

    Goal 1: Increase participation and completion rates of underserved and underachieving population segments.
    1. Objective A: Using the NCCCS Achieving the Dream (AtD) methodology to identify and define underserved & underachieving population segments at each NCCCS college, appoint a Task Force of NCCCS constituent groups [Senior level administrators for Instruction, Continuing Education, Student Services, Career Services, Admissions, Counseling, Recruiting, Basic Skills, & Planning & Research] to define and determine baseline participation and completion rates for these segments.
    2. Objective B: Engage the Task Force in developing a list of best practices to address participation and completion rate issues.

    Goal 2: Identify occupations in which workforce shortages are anticipated and develop programs to recruit new workers and retain and upgrade older workers to meet identified needs.

- Objective A: Identify and contract with a consultant or consulting group to (1) perform a supplementary gap analysis to validate educational gap areas identified in The HB1264 Report, Staying a Step Ahead: Higher Education Transforming NC's Economy, and (2) develop a gap analysis system that can be maintained by NCCCS staff long term.
- Objective B: Appoint a joint NCCCS-UNC Task Force comprised of college presidents, instructional deans, workforce development directors (to include UNC's SBTDC), private business representatives, regional economic development representatives, and other appropriate groups to address the findings of the gap analysis.

2. Critical Issue: Fiscal Resources, necessary for:
   - **Integrating technology into infrastructure, programs, services**
   - Meeting the Knowledge Economy's increased demand for higher education
   - Recruiting & retaining quality faculty, staff & administrators
   - Replacing, repairing, upgrading aging facilities & buildings
   - Meeting demand for increased accountability

   Goal 1: Enhance student access and affordability by establishing regular enrollment growth funding and an enrollment reserve to accommodate large increases in enrollment; by keeping student tuition rates as low as is reasonable, and by supporting funding for multi-campus colleges and off-campus centers.
   - Objective A: Research and develop funding models and strategies that provide adequate resources for enrollment (regular term, enrollment spikes, multiple locations); academic and student services support; and high cost – high demand programs for the enhancement of economic development.
   - Objective B: Validate the relationships between the cost of attendance, financial aid, and student success.
   - Objective C: **Research and develop the infrastructure, support and maintenance costs of a comprehensive distance education program.**
   - Objective D: Engage the NCACCP Finance Committee and Current Chair of the NC Association of CC Presidents in the evaluation of funding models, critique of strategies, and discussion of cost/benefit analyses.
   - Objective E: Produce a well-documented and defensible request for additional resources.

   Goal 2: Continue to raise compensation levels for faculty and staff to the national average and beyond.
   - Objective A: Research and develop cost estimates, using multiple data sources and comparative analyses, for a multi-year plan for elevating faculty and professional
   - staff salaries to peer national averages.
   - Objective B: Reward with budget flexibility those colleges that make measurable movements to the national average salaries.
   - Objective C: Evaluate and re-evaluate the plan adopted in 2005 to increase the compensation of adjunct faculty salaries.

3. Critical Issue: Human Resources, necessary for:
   - Responding to the aging out and impending retirements of large groups of faculty, staff & leaders
   - Responding to the anticipated leadership "brain drain" associated with Baby Boomers aging out

   Goal 1: Develop and implement a Succession Plan Model that allows colleges (and the System Office) to identify, prepare for, and manage the effects of impending and future retirements
   - Objective A: Appoint a Task Force of NCCCS constituent groups [Representatives of Trustees Association, State Board of Community Colleges, CC Presidents Association, and HR Directors Association, etc.] to research, identify & select an existing Succession Plan Model that can be adjusted to fit the needs of the NCCCS environment.
   - Objective B: Engage the Task Force in adjusting the identified model to fit the NCCCS institutional and System Office environments.

   Goal 2: Inventory and review all current Leadership Development Programs before developing and implementing an enhanced System-wide Leadership Development Program.
   - Objective A: Appoint a Task Force of NCCCS constituent groups [Representatives of NC Community College Leadership Program, NCSU's Leila Gonzales Sullivan, Fuqua School, CC Presidents Association, HR Directors Association, etc.] to inventory & review all current leadership development programs being utilized and supported by NCCCS.
   - Objective B: Engage the Task Force in developing an enhanced System-wide Leadership Development Program tailored to NCCCS needs.

4. Critical Issue: **Technology**: In order to:
   - Make a successful transition in the Knowledge Economy
   - Keep pace with constant technological advancements
   - Meet the growing technical & instructional expectations of Gen-X & Gen-Y students

   Goal 1: Establish Regional Technology Resource Centers that promote student learning through effective integration of technology resources and systems with curriculum development to establish effective instructional methods that can be implemented on campus and in distance learning offerings throughout the community college system.
   - Objective A: Involve a Task Force of NCCCS constituent groups [Representative from Trustees Association, State Board, CC President's Association, Business Officers Association, IT Managers, Instructional Administrators Association, Council of Community College Library Administrators, NCCC Adult Educators Association, Continuing Education Administrators Association, Student Services Administrators Association, etc.] to define the role, scope, & responsibility of the centers.
   - Objective B: Engage the Task Force in developing the organizational structure, rules of operation, and other operational center details.

- Objective C: Using the criteria established, engage the Task Force in developing an objective, RFP-based procedure – keeping geography and economic conditions in mind – to award the Centers to the most effective proposals.

Goal 2: Develop a five-year technology plan for the System that includes a technology needs assessment for the System, including infrastructure; the priority for addressing those needs; and funding strategies, both public and private.
- Objective A: Engage an inclusive, representative group of college technologists, IT staff, administrators, Council of Community College Library Administrators, NCCC Adult Educators Association, & faculty to work with the System Office to determine the scope and methodology for developing the plan that clearly defines "technology and the scope of technology to be addressed within the plan (e.g. infrastructure, support services, distance education).
- Objective B: Engage the Technology Group in developing the needs assessment instrument, determining a process for prioritizing needs, & identifying funding strategies.

5. Critical Issue: Increasingly Competitive Market, as associated with:
   - Increased demand for higher education attracting competition
   - Changing customer needs & expectations
   - Challenges: fiscal & human resources (brain drain)
   - Danger: Not recognizing & adjusting to market changes

   Goal: Develop, design, and implement a multi-phased study to accurately define the nature of the higher education market in the current environment.
   - Objective A: Engage a UNC System graduate school of business program to conduct a multi-phased study to accurately define the nature of the higher education market in the current environment.
   - Objective B: Engage student researchers with input from NCCCS constituent groups [Representatives from NC Association of CC Presidents, Faculty Association, Continuing Education Administrators Association, NC4SGA, Trustees Association, State Board, NCCC Adult Educators Association, etc.] in determining the scope of the study.

B. Requirements for transitioning existing IT activities/resources, including potential impact from consolidation and estimated costs for transitions

   a. Current projects

      The College Information System Project implementation will be completed in the fall, 2007 when the eighteen community colleges in Phase 2C will have implemented the student system for fall, 2007 registration, cash receipts, etc. Following completion of a small number of training classes for post go-live activities, the Project will be closed out. As described below (e., Human Resources), a plan has been developed on consultation with the ITS EPMO staff and the Office of State Budget and Management for the additional management and technical positions that are required to provide ongoing support and enhancement of the College Information System.

   b. Applications:

      The Legacy Applications Assessment (August, 2004) identified four applications for Renovation or Replacement and Technical Enhancement:

      1. Legacy GED System: Functionality will be merged with the current GED system in the GED Merge project described below in section II.A.1.
      2. College Data Account System: Functionality will be provided in the project described below in section II. A. 2.
      3. Current GED System: Functionality will be merged with the legacy GED system in the GED Merge project described below in section II.A.1.
      4. E-Leave (NCCCS): Functionality will be provided by the BEACON project.

   c. Infrastructure assets:

      The NCCCS Continuation Budget and CIS Budget provide sufficient equipment funds to replace and upgrade equipment on a recurring basis to meet security, reliability and capacity requirements both for the continuing operation of the Agency and the support of the local community colleges..

   d. Operations/IT management:

      1. Budgeting and investment justification and selection:

         Compliance with SB991, which is managed by the NCCS Project Management Office (see 2., below) has provided the need and basis for formal project management, including investment justification and selection for IT projects within the System Office. As an addition to the established System Office policies and practices relating to IT budget planning and administration (under the direction of the Vice Presidents for Administration and for Business and Finance), this will provide the required basis for sound financial management of IT projects and operations.

2. Project management and delivery:

   Beginning in 2005-06, NCCCS established a strategic initiative for a fully functional Project Management Office (PMO) that supports IT Project-related initiatives for the NCCCS System Office to comply with SB991, and assists and coordinates the work of the 58 community colleges in IT project management. The NCCCS PMO is being aligned with ITS, and NCCCS key initiatives. In 2005-06, the NCCCS PMO continued the process of staffing by replacing contractors with State positions. A mission statement was approved and a PMO Methodology was written and is being revised to include all 58 colleges operations as related to CIS and all System Office divisions. Key ongoing goals of the PMO are as follows:
   - Establish SB991 compliant policy and procedures for all PPM and APM initiatives within the System Office as well as IT projects that fall within mandates of SB991
   - Establish professional and effective project management procedures for all IT initiatives and all SO IT projects.

   The NCCCS PMO oversees the following groupings of ongoing projects and activities:
   - CIS Project Release 18 Implementations scheduled to end in January 2008
   - Other System Office IT Projects falling under SB991 and greater than $500,000
   - Other System Office IT Projects falling under SB991 and less than $500,000.

   In addition to sufficient staff of certified Project Managers to provide project management for all NCCCS IT projects, the NCCCS PMO requires:
   - PMO Tools for project management for the System Office and to increase project management communications with the 58 community colleges;
   - PMO education and certification;

3. Applications management:

   With the exception of the four applications listed in b., above, the System Office is responsible for the operation of a very limited number of applications (including the State-level data warehouse of community college information and the shared community college library online catalog). The majority of applications used in the normal operation of the System Office are provided by the Office of State Controller (NCAS, Central Payroll), Office of State Personnel (PMIS), etc.

4. Infrastructure assets management:

   As noted in c., above, the existing Community College System Office budgets, including the CIS Project budget, includes sufficient recurring funds to replace and upgrade the equipment and software required to support the mission and activities of the Community College System Office. Local community colleges are provided funds through annual allocations for operations and for equipment.

The System Office Information Services unit is responsible for the acquisition, maintenance and support of servers and for networked desktop / laptop computers and shared printers and the associated network infrastructure. Funds are budgeted and managed to ensure that System Office priorities are met within the available funds. Funds to acquire, maintain and support any additional equipment and software that are requested as part of Expansion Budget requests are included in those requests.

5. Internal agency consolidation plans and progress:

   As noted above (5.), the planning, management and support of the System Office IT infrastructure and applications in the responsibility of the Information Services unit. In isolated instances, other units of the System Office may be responsible for managing IT-related services that are provided through outsourced services to meet unique requirements.

6. Purchasing, contract development, and vendor management:

   The System Office Purchasing Coordinator is an integral part of the overall process that includes the Project Management Office (for new and continuing projects) and the Information Services unit (for continuing services, equipment and software upgrades, etc.).

7. Security management:

   The position of IT Security Analyst was established in Information Services and filled in 2005. This position continues to be responsible for development and maintenance of IT security policies and procedures and for implementing and monitoring IT security systems (firewalls, etc.). This position also provides advice and guidance to local community colleges in the areas of network and server security. The staff of the College Technical Support Team advises and assists local community colleges in applications security policies and practices.

8. Information and data management:

9. Service management:

   To more effectively plan and implement its responsibilities to provide support to the local community colleges, the System Office Information Services unit began implementing the Information Technology Infrastructure Library (ITIL) ISO 20000 standard for service management in the summer, 2006. As a result, the existing Help Desk redefined and redesigned as a Service Desk, and the overall organizational structure is designed to implement ITIL-based Problem, Change and Release Management. Funds have been identified to continue to provide staff members with training to achieve the desired levels of ITIL certification through the ITIL programs organized by State ITS.

10. Disaster recovery and business continuity:

The overall responsibility is at the Agency level, with leadership provided by the Vice Presidents for Administration and for Business and Finance. The Vice Presidents and key members of the staff of each Division are responsible for the respective business continuity plans. The Information Services unit (Administration Div.) is responsible for providing the technical infrastructure in collaboration with the Administrative and Facilities Services unit (Business and Finance Div.).

11. Technical architecture:

The technical architecture includes the following areas:
- The technical architecture for the College Information System (CIS) applications that are provided and supported by the System Office for the local community colleges is based on the technical architecture of the underlying COTS package, Datatel Colleague. The technical architecture for the CIS applications will continue to evolve as Datatel continues to update and enhance the applications software.
- The State-level data warehouse is currently based on the database management system and ETL (extraction-transformation-load) software that was selected for Phase 1 in 1999. As a part of two initiatives described below (II., A. 3) and 4)), the architecture and platforms will be evaluated based on identified needs to provide State and college-level data for decision-making.
- The technical architecture for the applications that provide service to the local colleges in the areas of online library catalogs, distance learning systems (including those in II. A. 5), 8) and 10, below) will continue to be based on the technical architecture of the COTS packages. To the maximum extent possible consistent with business requirements and available resources, standards-based and / or open-architecture systems will be selected.
- The technical architecture for the System Office's internal applications will continue to be based on an appropriate combination of vendor-specific architectures (such as that used by the Datatel Colleague software and the Groupwise enhanced email and calendar management system) that meet the Community College System's identified business requirement. While standards-based and / or open-architecture systems will be selected to the maximum extent possible, the primary objective is to achieve business requirements within available resources,

e. Human resources:

The transition from vendor support for the College Information System is expected to be completed bin2007-08 through the conversion of funds budgeted for contractual services to State positions. A plan has been developed to organize and manage these positions based on the ITIL service delivery standard. This plan has been developed collaboratively with the staff of the Office of State Budget and Management and the State Chief Information Officer.

II.   IT Initiatives Developed From and Aligning With Plan Drivers

   A.   IT initiatives (Expansion Budget Requests)

      1) GED Merge Project

         a) Name – GED Merge Project

         b) Summary Description – This project involves the merging of two GED Student Data Systems into a single system running on Datatel's Colleague System.

         c) Major objectives and benefits – The goal of this project is streamline the support of these systems into a single platform that matches the type systems utilized by the individual community colleges. This will eliminate two systems that are going off support and bring the GED System inline with currently support methodologies.

         d) Spring, 2008 through fall, 2008

         e) Relationship with other agency initiatives/projects – Utilize technology and staff skills required to support the CIS system.

         f) Relationship with statewide initiatives/projects **–** *Manage legacy applications (installed department business/program software) for reduced risks of failure and optimized life-cycle benefits and costs*.

         g) Order-of-magnitude costs – The cost $85,000 from state funds utilizing internal staff on a one time basis.

      2) College Accounting System Migration Project

         a) Name – College Accounting System Migration Project

         b) Summary Description – This project involves the migration of the College Accounting System from it current environment to a information system based on Datatel's Colleague environment.

         c) Major objectives and benefits – This will improve support for the system and eliminate technology that is becoming obsolete.

         d) Timeframe: Spring, 2008 through fall, 2008

         e) Relationship with other agency initiatives/projects – Utilize technology and staff skills required to support the CIS system.

f) Relationship with statewide initiatives/projects – Manage legacy applications (installed department business/program software) for reduced risks of failure and optimized life-cycle benefits and costs.

g) Order-of-magnitude costs – The cost $90,000 from state funds utilizing internal staff on a one time basis.

3) Community College System Data Warehouse Database Restructuring

  a. Name: Community College System Data Warehouse Database Restructuring

  b. Summary description: Analysis and resolution of problems with the integrity of exiting data warehouse curriculum and continuing education student data.

  c. Major objectives and benefits: Improved integrity of curriculum and continuing education student data will reduce the required time for System Office and college staff members to investigate and resolve discrepancies between local college data and data submitted to and loaded into the system-level data warehouse

  d. Timeframe: Summer, 2007 through Spring, 2008

  e. Relationship with other agency initiatives/projects: This initiative is required as a part of the ongoing Community College System effort to improve the quality of data reported by colleges that is used to satisfy State and Federal reporting requirements and in support of local and state-level decisions.

  The NC Community College 2007-09 strategic plan includes the following two goals:

  1) Increase participation and completion rates of underserved and underachieving population segments.
  2) Develop and implement a Succession Plan Model that allows colleges to identify, prepare for, and manage the effects of future retirements

  In order to accomplish these goals, accurate data systems for tracking both students and employees will be necessary. Without accurate data and appropriate analytical tools, information needed by policy makers will be lacking which could result in erroneous and costly policies being implemented.

  f. Relationship with statewide initiatives/projects- Manage legacy applications (installed department business/program software) for reduced risks of failure and optimized life-cycle benefits and costs.

g. Order-of-magnitude costs

   1) Amount: $300,000
   2) Sources of funding: Existing State appropriation
   3) Types of funding: recurring.
   4) Uses of funding: internal staff, outside consultants

4) Community College System Data Warehouse Database Reporting and Analysis Software

   a) Name: Community College System Data Warehouse Database Reporting and Analysis Software

   b. Summary description: An in-depth study of the future needs of users for analytical tools and the effectiveness of the current data warehouse structure to meet those needs..

   c. Major objectives and benefits: Enhanced ability of System Office and college staff members to use the data in the data warehouse for in-depth analysis, leading to improved decision-making at all levels.

   d. Timeframe: Summer, 2007 (study, planning) through 2008 – 2010 (Design and implementation

   e. Relationship with other agency initiatives/projects:

   f. Relationship with statewide initiatives/projects
     • Manage legacy applications (installed department business/program software) for reduced risks of failure and optimized life-cycle benefits and costs.

   g. Order-of-magnitude costs

     1. Amount: $750,000 for study and planning, $5,000,000 for design and implementation
     2. Sources of funding: State appropriation
     3. Types of funding: non-recurring.
     4. Uses of funding: internal staff, outside consultants, software and equipment

5) Learning Object Repository (LOR).

   a. Name: Learning Object Repository (LOR) Project.

   b. Summary description: Continued development of learning objects and ongoing support for the Learning Object Repository platform (equipment and software), which represents the most cost-effective way to develop online learning modules for statewide use.

c. Major objectives and benefits: A Learning Object Repository (LOR) provides all community colleges with access to a state-of-the art online teaching and learning platform that provides learning objects (web resources), text resources, and student tracking capability equally suitable for customized needs of colleges and regional/statewide initiatives.

d. Timeframe: Fall, 2006 through 2008-09. Planning for the NCCCS LOR has been underway since 2005. The LOR Project is scheduled to be in initiation phase fall 2006.

e. Relationship with other agency initiatives/projects

The LOR project is initially funded from Distance Learning 2+2 recurring funding since the Project was not funded in the 2006 Expansion Budget.

f. Relationship with statewide initiatives/projects

   o *Perform strategic planning for identifying best IT investments.*

g. Order-of-magnitude costs

   • Sources of funding: Expansion Budget Request - $624,000
   • Types of funding: recurring.
   • Uses of funding: Equipment and software license and support costs.

6)   Learning Technology Support Services Staffing

a. Name: Learning Technology Support Services Staffing

b. Summary description: Provide sufficient Learning Technology Support Services personnel and materials to support instructional programs, instructional training, and staff development statewide.

c. Major objectives and benefits

The 2006 Expansion Budget provided $2,200,000 in new appropriations, and much of the $1,000,000 of recurring 2+2 Initiative funding now supports the NCCCS Distance Learning Initiative. New projects created by this funding include: the NCCCS Learning Object Repository, the Moodle Users Group, the Blackboard CMS upgrade for 39 institutions, Online Help Desk for the entire System, and the creation of 8 additional NCIH sites. Positions are required to provide ongoing technical support and management of these funds. Support needs include infrastructure management, IT services, instructional design, video services, online resources, and database support. Staff positions include two director positions, a software database specialist, and two instructional designers. This request includes additional software and technology operational funds. Recommendation for the two instructional designers comes from the House Bill 1264 study completed spring 2006.

    d. Timeframe: Summer, 2007 ongoing

    e. Relationship with other agency initiatives/projects

       This initiative is required to support the following sections of the NCCCS Strategic Plan – 2007-09:
- Critical Issue 2, Goal 1, Objective C: Research and develop the infrastructure, support and maintenance costs of a comprehensive distance education program
- Critical Issue 4, Goal 2: Develop a five-year technology plan for the System that includes a technology needs assessment for the System, including infrastructure; the priority for addressing those needs; and funding strategies, both public and private.

    f. Relationship with statewide initiatives/projects

- Consolidate common shared technical infrastructure and technical services for greater savings and better operational performance.
- Perform strategic planning for identifying best IT investments.
- Manage projects for superior results.
- Develop a proficient and appropriately staffed IT workforce.

    g. Order-of-magnitude costs:

- Amount: $400,000 for salary funds and software and operational costs
- Sources of funding: State Appropriation
- Types of funding: recurring
- Uses of funding: internal staff, hardware, software, etc.

7) Data Connectivity

    a. Name: Data Connectivity.

    b. Summary description: Increased bandwidth is a critical requirement for NCCCS institutions to support distance learning and mission-critical instructional/administrative functions.

    c. Major objectives and benefits: Expanding needs include support of rapidly expanding distance learning, learning technology, online library resources, Campus Cruiser student portal, NCLIVE, and current and emerging software and web-based instructional applications. Specifically, enhanced e-learning resources in the form of enterprise-course management system and the proposed Learning Object Repository (LOR) will provide unprecedented access to digital learning content resulting in additional strain on bandwidth resources across the NCCCS. Moreover, colleges require increased bandwidth to conform to university and industrial standards required to support industry specific training in areas such as biotechnology and nanotechnology.

Two requests are suggested to improve mission-critical NCCCS data connectivity challenges.

The first request is to bring NCCCS data connectivity toward "parity" with the UNC System. A FTE-based Data connectivity solution is based on a realistic size-appropriate bandwidth solution. While NCCCS institutions are not research institutions, the percentage of distance learners and non-residential students place increasing demands on community college bandwidth. The budget figure for data connectivity was recommended by ITS staff. Requested connectivity service is based on base-level bandwidth commensurate with institutional size:
- 20 Mbps for colleges under 1,000 FTE (our smallest 6 institutions).
- 45 Mbps for colleges between 1,000 and 2,000 FTE (24 institutions).
- 100 Mbps for colleges over 2,000 FTE (28 institutions).

The second request is to fund a consultant to "Ensure that community colleges have the necessary bandwidth to expand online offerings by engaging a consultant specializing in technology infrastructure planning and consulting with UNC on possibilities for a shared solution" (This recommendation is from the House Bill 1264 study completed spring 2006).

Note: The first request is not a long-term solution and is intended to provide only immediate bandwidth relief for NCCCS institutions. The request was developed in consultation with ITS and NCREN staff. In addition to this request, a report commissioned by House Bill 1264 underscores the inadequate data bandwidth now provided our NCCCS institutions and recommends procurement of a consultant to jointly plan appropriate connectivity solutions with the UNC System for long-term solutions. Finally, the January 2006 NC E-Learning Commission Phase II recommendations include full Gigabyte data connectivity for NCCCS institutions as part of a state-wide approach to e-learning infrastructure solutions.

d. Time frame: Summer, 2007 and beyond

e. Relationship with other agency initiatives/projects: Increased bandwidth is required to support enhanced e-learning resources in the form of enterprise-course management system and the proposed Learning Object Repository (LOR). These initiatives will provide unprecedented access to digital learning content resulting in additional strain on bandwidth resources across the NCCCS

f. Relationship with statewide initiatives/projects

- Consolidate common shared technical infrastructure and technical services for greater savings and better operational performance.
- Perform strategic planning for identifying best IT investments.
- Manage projects for superior results.

g. Order-of-magnitude costs

- Amount required $4,635,000 in recurring funding for bandwidth; $500,000 non-recurring for consultant for NCCCS/UNC bandwidth shared solutions
  - Sources of funding: State appropriation
  - Types of funding: Non-recurring funding for consultant; recurring funding for required bandwidth
  - Uses of funding: Outside consultant, network bandwidth purchased from ISP.

8) Virtual Computing Lab (VCL) NCCCS/UNC Collaboration

a. Name: Virtual Computing Lab (VCL) NCCCS/UNC Collaboration

b. Summary description: The NCCCS VLC would be modeled after the North Carolina State University Virtual Computing Lab (vcl.ncsu.edu) which provides on-demand reservation-based remote access to an extensive library of engineering, design, and scientific software applications.

c. Major objectives and benefits: The VCL addresses the increasing needs of both local and distance students and faculty by providing 24x7 access to state-of-the-art secure advanced computing laboratory facilities for students, either in classroom or individually. Access to VCL services can be (1) at the direction of classroom instructors or (2) for individual student training on an anytime, anyplace basis. 100 CPU capacity would serve up to 3,000 students per semester and provide state-wide access to "seat" licensed software. Reduced IT support and drastically reduced down-time of computers are an added advantages of VCL technology.

d. Timeframe: Fall, 2007 through summer, 2008

Relationship with other agency initiatives/projects: This initiative is required to support the following section of the NCCCS Strategic Plan – 2007-09:

Critical Issue: Technology: In order to:
- Make a successful transition in the Knowledge Economy
- Keep pace with constant technological advancements
- Meet the growing technical & instructional expectations of Gen-X & Gen-Y students

Goal 1: Establish Regional Technology Resource Centers that promote student learning through effective integration of technology resources and systems with curriculum development to establish effective instructional methods that can be implemented on campus and in distance learning offerings throughout the community college system.

e. Relationship with statewide initiatives/projects
   - Consolidate common shared technical infrastructure and technical services for greater savings and better operational performance.
   - Perform strategic planning for identifying best IT investments.
   - Manage projects for superior results.
   - Provide measurable, performance-based delivery of services.

f. Order-of-magnitude costs
   - Amount: $500,000 in non-recurring and $130,000 in recurring funding
   - Sources of funding (e.g., state, federal, local, grant, etc.).
   - Types of funding (i.e., one-time or recurring).
   - Uses of funding (e.g., internal staff, outside consultants, hardware, software, etc.)

9) Infrastructure Support Center (ISC) NCCCS/UNC Collaborative Planning.

a. Name: Infrastructure Support Center (ISC) NCCCS/UNC Collaborative Planning.

b. Summary description: The ISC will provide research and leadership in critical areas of application and database integration

c. Major objectives and benefits: In collaboration with UNC IT and DL/e-learning staff, the ISC will use "alignment strategies" (focus on standards-based, scalable, and open source or aggregate FTE licensed applications) to select integration solutions that provide cost-effective and increasing performance in areas of:
   - Tracking of student performance through 2+2+2 migration
   - Database interoperability (NCWISE, CIS, Banner Project) K-20 database
   - Interoperability of NCLIVE, NCCCS/UNC/NCVPS e-CMS, and NCLOR
   - Synchronous and asynchronous Web-based learning resources

d. Timeframe: Summer, 2007 ongoing

e. Relationship with other agency initiatives/projects: This initiative is required to support the following section of the NCCCS Strategic Plan – 2007-09:

   Critical Issue: Technology: In order to:
   - Make a successful transition in the Knowledge Economy
   - Keep pace with constant technological advancements
   - Meet the growing technical & instructional expectations of Gen-X & Gen-Y students

   Goal 1: Establish Regional Technology Resource Centers that promote student learning through effective integration of technology resources and systems with curriculum development to establish effective instructional methods that can be implemented on campus and in distance learning offerings throughout the community college system.

f. Relationship with statewide initiatives/projects

- Consolidate common shared technical infrastructure and technical services for greater savings and better operational performance.
- Perform strategic planning for identifying best IT investments.
- Manage projects for superior results.

g. Order-of-magnitude costs

- $500,000 in recurring funding
- Sources of funding; State appropriation.
- Types of funding: recurring).
- Uses of funding: internal staff, hardware, software

10) Joint NCCCS/UNC E-Learning Course Management System Evaluation Team

a. Name: Joint NCCCS/UNC E-Learning Course Management System Evaluation Team

b. Summary description: NCCCS/UNC collaborative study to determine future higher education Learning Management System (LMS) requirements and conduct an RFP process.

c. Major objectives and benefits: The current Blackboard and WebCT contracts for both UNC and NCCCS will run out June 30, 2008. This project will fund a joint NCCCS/UNC collaborative study to determine future higher education Learning Management System (LMS) requirements, make recommendations, and conduct a selection process to establish a single LMS system to be used by both Systems that provides enhanced e-learning capabilities based on economies of scale licensing, support, and utilization.

d. Timeframe: Summer, 2007 through fall, 2008

e. Relationship with other agency initiatives/projects: This initiative is required to support the following section of the NCCCS Strategic Plan – 2007-09:

Critical Issue: Technology: In order to:
- Make a successful transition in the Knowledge Economy
- Keep pace with constant technological advancements
- Meet the growing technical & instructional expectations of Gen-X & Gen-Y students

f. Relationship with statewide initiatives/projects

- Consolidate common shared technical infrastructure and technical services for greater savings and better operational performance.
- Perform strategic planning for identifying best IT investments.

g. Order-of-magnitude costs

- Request: $262,500
- Sources of funding: State appropriation
- Types of funding: non-recurring
- Uses of funding: internal staff, outside consultants